REMARKS/ARGUMENTS

Entry of this AMENDMENT UNDER 37 CFR 1.116 at least in that it reduces issues by cancelling claims, is respectfully requested.

Some earlier rejections are withdrawn. The following rejections are pending resolution.

As required by the Examiner, claims 13-20 are canceled.

Claims 1, 6, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by or, alternatively, under 35 U.S.C. 103(a) as being obvious over SMITH (4,394,403).

Claims 1, 3, 4, 6, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by SASAKI et al (6,794,451).

Claims 5 and 10 are rejected under 35 USC 103(a) over Smith or Sasaki (as applied for the above rejections) in combination with HIRAI (6,846,074).

There is also a provisional double patenting rejection. However, since neither application appears to be allowed, claims may be further amended and a Terminal Disclaimer is premature. In addition, comparison testing discussed below shows the special effect of the selection parameters and may avoid the rejection.

The primary references are Smith and Sasaki. The present invention is distinguished from both Smith and Sasaki et al in that it is required by claim 1 that in the oxetane compound I of the formula set forth in claim 1, the longer C-O bond distance of the two C-O bond distances is from 0.1464 to 0.1500 nm; and for the oxetane compound I' of the formula set forth in claim 6, the longer C-O bond distance of the two C-O bond distances is from 0.1435 to 0.1461 nm and the oxygen atom has a charge of from -0.330 to -0.281.

The Examiner states on page 4, lines 8-16 of the outstanding Office Action,

> "Smith discloses compositions comprising oxetane compounds wherein the R groups are not simultaneously hydrogen, thus providing an oxetane compound as set forth in the instant claims and anticipating the instant claim. Smith does not mention C-O bond lengths in the oxetane compounds or charge on the oxygen atom, however, since the species of the disclosed compounds and species of the claimed compounds overlap, it would be expected that these properties would be inherent to the species disclosed in the absence of evidence to the contrary. Alternatively, it would have been obvious to one skilled in the art at the time of the invention to select an oxetane compound wherein the R groups are not simultaneously hydrogen from the oxetane compounds disclosed

> by smith to provide a photopolymerizable composition, as taught by Smith."

The Examiner further states on page 5, lines 2-11 of the outstanding Office Action,

> "Sasaki et al disclose compositions comprising oxetane compounds wherein the R groups are not simultaneously hydrogen, thus providing an oxetane compound as set forth in the instant claims and anticipating the instant claim. Sasaki et al do not mention C-O bond lengths in the oxetane compounds or charge on the oxygen atom, however, since the species of the disclosed compounds and species of the claimed compounds overlap, it would be expected that these properties would be inherent to the species disclosed, in the absence of evidence to the contrary. Alternatively, It would have been obvious to one skilled in the art at the time of the invention to select an oxetane compound wherein the R groups are not simultaneously hydrogen from the oxetane compounds disclosed by Sasaki et al to provide a cationically polymerizable composition and tacky polymer, as taught by Sasaki et al."

Smith and Sasaki et al do not disclose the oxetane compound of the formula set forth in claim 1 or in claim 6 (hereinafter also referred to as the oxetane compound as claimed), which has the properties as recited in claim 1 or 6 nor does it disclose

that the oxetane compound as claimed is preferred. The Examiner considers these properties inherent.

The Examiner states in the above statement, "Smith and Sasaki et al. disclose an oxetane compound wherein the R groups are not simultaneously hydrogen thus providing an oxetane compound as set forth in the instant claims and anticipating the instant claim." Oxetane compound 31 used in the Smith Examples, which is considered to be best mode of Smith, or Oxetane compound OXR-12 and Oxetane compound OXT-212 (wherein in formula 3, R_7=R_8=H, R_{10}=ethyl, R_9=2-ethylhexyl and X=oxygen) used in the Sasaki et al Examples, which are considered to be best mode of Sasaki et al, are oxetane compounds wherein the R groups are not simultaneously hydrogen, as the Examiner states above. And it was shown in the Declaration filed June 9, 2005 that the C-O bond distance in the invention and charge of the oxygen atom of these oxetane compounds, oxetane compound 31, oxetane compound OXR-12 and oxetane compound OXT-212, fall outside the claimed range, showing that the claimed range of the C-O bond distance in the invention and charge of the oxygen atom would not have been inherent in Smith and Sasaki et al.

In response to this evidence, the Examiner further states on page 3, lines 15-18 of the outstanding Office Action,

> "Applicant has not provided any evidence to show that selection of only oxetane compounds wherein substituents R3 to R6 are not simultaneously hydrogen provides unexpected results in the instantly claimed compositions compared with compositions comprising oxetane compounds wherein substituents R3 to R6 are simultaneously hydrogen."

In view of this position taken by the Examiner, and in order to provide further evidence of unexpected results of the invention, additional comparative tests were carried out, based on the disclosure of Smith and Sasaki at al. The results are shown in shown in Table IV of an executed DECLARATION enclosed herewith. As is apparent from Table IV of the DECLARATION, the inventive samples I-1 and 1-2 each employing the oxetane compound as claimed provide excellent character quality under various recording circumstances, and exhibit excellent recording property that no or little color contamination occurs under various recording circumstances, compared with comparative sample C-I employing oxetane compound 31 of smith, or comparative samples C-2 and C-3 employing oxetane compound OXT-212 and OXR-12 of Sasaki et al, respectively. The results are unexpected to one of ordinary skill in the art. Therefore, the present invention is not shown by Smith or Sasaki, and it would not have been obvious to one of ordinary skill in the art to arrive at the subject matter of the present claims over Smith or Sasaki et al. (The

additional art was cited with respect to the other features and does not bridge the gap in the art teaching.)

In the tests reported in the DECLARATION, although oxetane compounds wherein R_3 to R_6 are simultaneously hydrogens are used as comparative compounds, since there are no disclosure in Smith and Sasaki et al of example compounds other than those compounds, an oxetane compound wherein R_3 to R_6 are not simultaneously hydrogens but falls outside the claimed range of the C-O bond distance in the invention and charge of the oxygen atom, for example, Comparative Compound 1 used in Ink set 1 (see page 63 of the Specification), is also inferior in character quality and color contamination evaluation to the oxetane compound as claimed the invention (see page 70, Table 8 of the Specification).

In view of the above, it is submitted that the present invention is not shown or suggested by the cited art. Withdrawal of the rejections and allowance of the application are respectfully requested.

Respectfully submitted,

Frishauf, Holtz, Goodman
& Chick, P.C.
220 Fifth Ave., 16th Floor
New York, NY 10001-7708
Tel. No. (212) 319-4900
Fax No.: (212) 319-5101
MJC/ld

MARSHALL J. CHICK
Reg. No. 26,853

Enclosure: EXECUTED DECLARATION UNDER 37 CFR 1.132
of Toshiyuki TAKABAYASHI dated August 24, 2005